



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5

77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

JUN 08 2009

REPLY TO THE ATTENTION OF:

E-19J

Mr. Robert F. Tally, Jr., P.E.
Division Administrator
Federal Highway Administration-Indiana Division
575 North Pennsylvania Street, Room 254
Indianapolis, Indiana 46204

Karl B. Browning
Commissioner
Indiana Department of Transportation
100 North Senate Avenue, Room N462
Indianapolis, Indiana 46204

Re: Tier 2 Draft Environmental Impact Statement (DEIS) for the I-69 Evansville to Indianapolis, Indiana Project, Section 3: Washington to Crane Naval Surface Warfare Center (NSWC), Indiana CEQ#: 20090032

Dear Mr. Tally and Mr. Browning:

In accordance with Section 309 of the Clean Air Act and the National Environmental Policy Act (NEPA), the U.S. Environmental Protection Agency (EPA) has reviewed the Draft Environmental Impact Statement (DEIS) issued by the Federal Highway Administration (FHWA), for the above-referenced project.

EPA rates the preferred alternative of the DEIS as LO, Lack of Objections. An explanation of our rating system can be found in the enclosure entitled, "Summary of Rating Definitions and Follow-Up Action." The Section 3 Tier 2 DEIS is informative and reflects efforts made by FHWA and the Indiana Department of Transportation (INDOT) to use adequate detailed information in the development of this project to avoid and minimize impacts. We have not identified any potential environmental impacts requiring substantive changes to the proposal for Section 3 of the I-69 project. Our detailed comments focus on clarifications and voluntary measures. The topics covered in our detailed comments are air quality, air quality mitigation during construction, floodplains, noise, watersheds and wetlands, and some general items. You will find our detailed comments in the enclosure entitled, "*EPA detailed comments on I-69 Evansville to Indianapolis, Indiana Tier 2 DEIS Section 3: Washington to Crane NSWC.*"

We commend FHWA and INDOT for their work on major mitigation initiatives, particularly: Context Sensitive Solutions (CSS) / Community Advisory Committees

(CAC), Geographic Information Systems (GIS), and the updating of the County Historic Surveys. We also commend the work on and financial support of the Community Planning Program. Your intent to track mitigation commitments and mitigation activities associated with each resource in Section 3 will reassure agencies and citizens that INDOT and FHWA take the complex mitigation for this project seriously. Some of these initiatives will enhance other agencies' ability to research their project's impacts in this region of Indiana. Some of the initiatives set good examples of mitigation to possibly use in other federal and state projects.

Project Background

Section 3 is one of six sections being evaluated for the 142-mile-long I-69 project. I-69 is proposed as a freeway facility that utilizes interchanges for access control. Section 3 of the I-69 project is 25.8 miles long. The termini of Section 3 are at US 50, east of Washington, Indiana and US 231 near Scotland, Indiana.

In the Section 3 Tier 2 DEIS, a no-build alternative and four action alternatives were presented. Alternative 1 was chosen as the preferred alternative. The preferred alternative has 18 residential relocations, 14.77 acres of wetland impact, 23.2 acres of floodplain impact, 86.2 acres of upland forest impacts, 6,915 linear feet (lf) of perennial streams, 12,388 lf of intermittent streams, 16, 572 lf of ephemeral streams, and approximately 1,500 acres of farmland impacts.

For comparing alternatives, Section 3 was broken into 5 segments. The 5 segments that comprised alternative 1 (the preferred alternative) represented the best trade-off in impacts between the alternatives.

Thank you for giving us the opportunity to review the DEIS. If there are any questions, please call Julie Guenther, of my staff, at 312-886-3172 or email her at guenther.julia@epa.gov.

Sincerely,



Kenneth A. Westlake, Supervisor
NEPA Implementation
Office of Enforcement and Compliance Assurance

Enclosures: 2

cc: U.S. Army Corps of Engineers – Louisville District, Attention: CELRL-OP-F,
P.O. Box 59, Louisville, KY 40401-0059 (Michael Hasty)

U.S. Fish and Wildlife Service, Region 3, Bloomington Ecological Services
Office, 620 S. Walker St, Bloomington, IN 47403-2121 (Scott Pruitt/Andy King)

**Indiana Department of Environment Management, Office of Water Quality,
Section 401 Water Quality Certification Program, 100 N. Senate Ave, MC 65-40,
Indianapolis, IN 46204-2251 (Jason Randolph, South Area Project Manager)**

**Indiana Department of Natural Resources, 402 W. Washington St., Room W264,
Indianapolis, IN 46204 (Matt Buffington)**

Air Quality

As noted in Section 5.9, Air Quality, Greene County is a designated maintenance area for the eight-hour ozone standard and has approved motor vehicle emission budgets. An analysis is required to demonstrate conformity to the approved budgets. We understand that the conformity analysis will be performed before the Record of Decision (ROD) is completed. We suggest the Final Environmental Impact Statement (FEIS) state that the conformity analysis documentation will be presented for public review and comment according to the state public participation requirements.

Air-Quality Mitigation during Construction

Exposure to diesel exhaust by construction workers and those nearby a construction site can have serious health implications. For this reason, EPA recommends Best Available Diesel Retrofit Control Technology (BACT) on all significant construction projects. We believe this project is a significant construction project because of the size and duration of the overall project, the proximity to some residential areas, the use of diesel equipment for purposes of construction, and the existing problems with ozone in the area.

Typically BACT requirements can be met through the retrofit of all diesel-powered equipment with diesel oxidation catalysts or diesel particulate filters, in addition to other strategies or technologies (for example, cleaner burning fuels or anti-idling policies). The statement below is reflective of a study EPA completed on diesel exhaust health effects:

Long-term (i.e., chronic) inhalation exposure to diesel exhaust is likely to pose a lung cancer hazard to humans, as well as damage the lung in other ways depending on exposure. Diesel exhaust is listed as a human carcinogen by the State of California and a likely human carcinogen by EPA. Short-term (i.e., acute) exposures can cause irritation and inflammatory symptoms of a transient nature, these being highly variable across the population. The assessment also indicates that evidence for exacerbation of existing allergies and asthma symptoms is emerging. EPA recognizes that diesel exhaust, as a mixture of many constituents, also contributes to ambient concentrations of several criteria air pollutants including nitrogen oxides and fine particulates, as well as other air toxics.¹

In addition, we recommend that the FEIS contain a description of efforts to minimize the impact of idling vehicles and construction equipment, and how such anti-idling measures will be enforced. We recommend that the idling of all engines not exceed 5 minutes, and that proper enforcement is in place to ensure compliance. Shutting down gasoline and diesel vehicles and equipment when engine power is not required will

¹ U.S. Environmental Protection Agency (EPA). (2002) Health assessment document for diesel engine exhaust. Prepared by the National Center for Environmental Assessment, Washington, DC, for the Office of Transportation and Air Quality; EPA/600/8-90/057F. Available from: National Technical Information Service, Springfield, VA; PB2002-107661, and <<http://www.epa.gov/ncea>>.

reduce emissions of carbon monoxide, carbon dioxide, particulate matter, volatile organic compounds, oxides of nitrogen, and mobile source air toxics. These emissions can adversely affect local air quality, adversely affect human health through exposure, and can seep into nearby buildings and adversely affect indoor air quality.

These air quality mitigation measures for construction should be considered by INDOT. We recommend that INDOT formalize their actions for the entire I-69 project by developing and implementing a construction emissions reduction plan. Although not required by EPA regulations, similar contract specifications have been established for other large construction projects, including the O'Hare Airport Modernization Project and the Dan Ryan highway project in Chicago.

Options to include in such a plan include:

- (a) retrofitting off-road construction equipment including repower or engine upgrades
- (b) using ultra-low-sulfur fuels for all equipment
- (c) limiting the age of on-road vehicles in construction projects to 1998 and newer and 1996 and newer for off-road equipment
- (d) fugitive dust control plans
- (e) diesel particulate traps and oxidation catalysts
- (f) using existing power sources or clean fuel generators rather than temporary power generators
- (g) encouraging the use of off-road equipment that meets the Tier 3 standards

EPA is available to assist in efforts to select mitigation strategies that would be included in the final project. EPA has developed a compendium of contract specifications and language to assist State DOTs and other proponents of construction projects. Please see the following link for the specifications and language: <http://www.epa.gov/midwestcleandiesel/projects/index.html>

Floodplains

Table 7-1 shows that floodplains will not be completely bridged. We suggest bridging all floodplains in their entirety. At a later date, if a group wants to restore the creek completely, this will be done more easily if the entire floodplain is bridged. If you do not plan on bridging the entire floodplain of each creek, please explain why in section 7.2, page 7-11.

Noise

From table 5.10-5, page 5-168 of the DEIS, the noise model predicts that the Preferred Alternative impacts 3 residences. We understand that there will be no formal noise-related hearings and/or information meetings because noise barriers are not being considered. In addition, as stated in the DEIS (page 5-172), the reasonableness of constructing noise barriers for

the preferred alternative will be re-evaluated during the FEIS. These statements lead us to the following two questions:

- Will these three residences be informed (beyond the availability of this DEIS) of the predicted noise impact to their home environment?
- Since the impacted receivers identified do not meet the reasonableness criteria, is there any other type of mitigation they can request (such as acquisition or sound insulation)?

Watersheds and Wetlands

Overall, the preferred alternative has comparable or fewer impacts to perennial streams than the other alternatives. The alternatives have a fairly comparable range of impacts to wetlands both in quality and quantity (14.77 acres - 15.60 acres). However, we suggest the single-point interchange be built at US 231 to decrease wetland, stream and forest impacts.

The formal wetland delineation for Clean Water Act (CWA) Section 404 and Section 401 permits will be conducted after the DEIS on the preferred alternative. The delineation will refine the exact amount of wetland area impacted. The 14.77-acre estimate will increase or decrease based on the detailed, on-the-ground information of delineation. We understand that this information will be carried forward to the CWA Section 404 and Section 401 permit process. The approach taken here is acceptable to us for DEIS purposes, recognizing that the wetland impacts presented will likely change in the FEIS as a result of the delineation.

Combined mitigation sites for impacts to wetlands, streams, threatened and endangered species, and forests have been identified in separate planning documents and appear capable of producing the quantity and quality of mitigation to offset the wetland and stream losses for CWA Section 404 permitting purposes. The DEIS and supporting documentation shows appropriate progress toward providing compensatory mitigation.

We suggest some clarifications to be included in the FEIS:

- 1) In section 5.19.2.1, wetlands are cited as valuable for cranberry production. To the best of our knowledge, there is no commercial cranberry production in Indiana. Therefore, this statement is not relevant.
- 2) In section 5.23.2, an additional step should be added. EPA reviews the jurisdictional determinations made by the US Army Corps of Engineers under our CWA authority.
- 3) In section 5.23.3, there is an inaccurate statement. EPA has no oversight of CWA 401 water quality certifications for states. The certifications are undertaken by a state to ensure that the federal permit does not adversely impact state water quality.

General

We understand the following issues will be resolved and included in the FEIS:

- Final configuration of segment 3E-1. If the "hybrid alternative" is chosen as the preferred alternative in Section 4, segment 3E-1 may need to change to connect with the terminus of the Section 4 "hybrid alternative."

- A study for added travel lanes on US 231. Added travel lanes are not in INDOT's long-range plan. We understand that impacts documented in the DEIS include added travel lanes on US231.
- Results of the Phase Ia Archaeological Survey for the preferred alternative and the Tier 2 Section 3 Memorandum of Agreement with the State Historic Preservation Office.
- Total tally of I-69 direct impacts to key resources across all six Tier 2 Sections.
- 66 dBA noise contour mapping.

We have these further suggestions and questions:

- When will the tracking summaries of mitigation commitments and mitigation activities (page 7-11 DEIS) first be provided to the permitting agencies and EPA?
- We understand that construction of the rest area and US231 may be deferred. We recommend purchasing the right-of-way now for the possible construction to avoid changing configurations and increasing impacts.
- INDOT should consider using energy-efficient, low-impact lighting. The Section 3 Tier 2 FEIS should discuss whether INDOT will commit to using this type of lighting.

SUMMARY OF RATING DEFINITIONS AND FOLLOW UP ACTION

Environmental Impact of the Action

LO-Lack of Objections

The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC-Environmental Concerns

The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impacts. EPA would like to work with the lead agency to reduce these impacts.

EO-Environmental Objections

The EPA review has identified significant environmental impacts that must be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU-Environmentally Unsatisfactory

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the CEQ.

Adequacy of the Impact Statement

Category 1-Adequate

The EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collecting is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2-Insufficient Information

The draft EIS does not contain sufficient information for the EPA to fully assess the environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

Category 3-Inadequate

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

*From EPA Manual 1640 Policy and Procedures for the Review of the Federal Actions Impacting the Environment